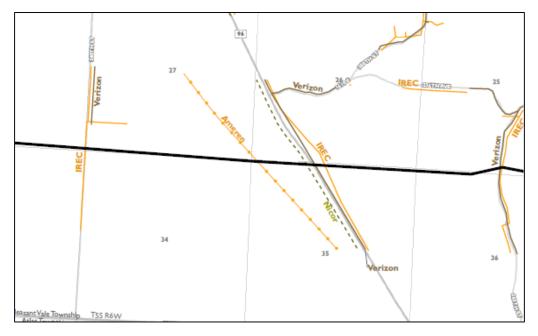
1. GBX's Routing Study identifies existing transmission lines as a routing opportunity (Ex. 8.2, p. 32). The map on page 4 of Attachment 6 to GBX's Petition (Maps Identifying Utilities on Route) shows that GBX's Alternate Route in Pike County crosses Ameren's transmission line, west of Hwy 96 and near 232nd Street, as Ameren's line continues to the southeast and GBX's Alternate Route continues to the east. The relevant portion of the referenced map is copied below:



The map on page 28 of Attachment 6 shows that, further to the south, GBX's Proposed Route also crosses the Ameren transmission line west of Hwy 96 as Ameren's line continues southeast and GBX's Proposed Route continues east. The relevant portion of that map is copied below:



The same location is illustrated on adjoining maps provided on pages 5, Tile 2 of 77 (Part 1, Att. 3 – Part 1) and 53, Tile 26 of 77 (Part 2 Att.3- Part 5) of Attachment 3 to GBX's August 12, 2015, Compliance filing. The relevant portions of these two maps are copied below, page 5 first:

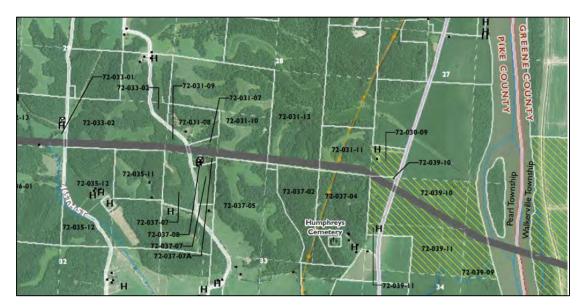




a) Did GBX consider a route alternative in Pike County that, from west to east, would use GBX's Alternate Route until reaching Ameren's transmission line, then turn and parallel Ameren's transmission line to the southeast until reaching GBX's

Proposed Route, then turn east to follow GBX's Proposed Route? If no, why not? If yes, please fully explain why GBX rejected this route alternative.

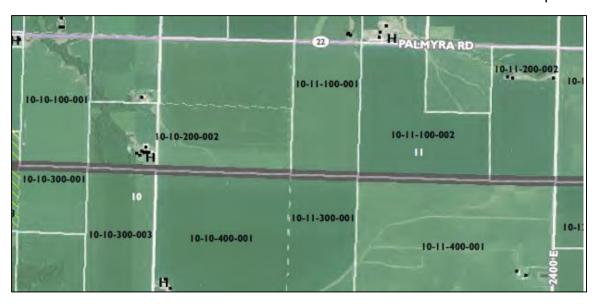
- b) Compared to GBX's Proposed Route and Alternate Route in Pike County, would using the route alternative contemplated in (a):
 - i. Reduce the amount of required tree clearing? If yes, by how many acres?
 - ii. Reduce the length of the transmission line? If yes, by how many feet?
 - iii. Reduce the cost of constructing the transmission line? If yes, by how many dollars?
- 2. The map on page 69, Tile 34 of 77 (Part 2, Att. 3 Part 6) of Attachment 3 to GBX's August 12, 2015, Compliance Filing appears to show that GBX's Alternate route in Pike County passes near two residences on separate parcels west of the Illinois River: (1) 72-037-08 and (2) 72-033-01. The relevant portion of the map is copied below:



Please provide GBX's estimate of the distance, in feet, between the centerline of GBX's transmission line and each of these residences:

•	Parcel 72-037-08:	feet from centerline to residence=	
•	Parcel 72-033-01:	feet from centerline to residence=	

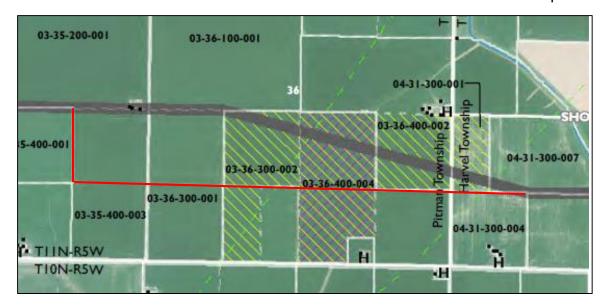
3. The map on page 77, Tile 38 of 77 (Part 2, Att. 3 – Part 7) of Attachment 3 to GBX's August 12, 2015, Compliance Filing appears to show that GBX's Alternate Route in Greene County passes near a residence on a Parcel 10-10-200-002, located west of CR 2400E and south of Palmyra Rd. The relevant portion of GBX's map is copied below:



Please provide GBX's estimate of the distance, in feet, between the centerline of GBX's Alternate Route and this residence:

Parcel 10-10-200-002: feet from centerline to residence=

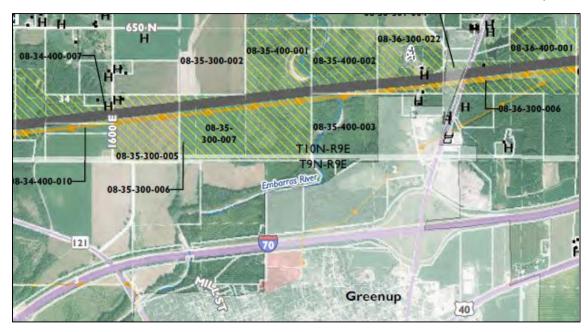
- 4. In response to a landowner's concern about GBX's Alternate Route crossing his property at a diagonal, GBX states on Page 4 of Attachment 5 to GBX's August 12, 2015, Compliance Filing that two 90 degree angles within 1,200 feet would result in "a concentration of more extensive, challenging, and more impactful construction operations over a short distance." Please fully explain GBX's statement including how using a route that follows field and/or property lines would result in more impactful construction operations than would a line that cuts diagonally across tilled fields.
- 5. The map on page 91, Tile 45 of 77 (Part 2, Att. 3 Part 8) of Attachment 3 to GBX's August 12, 2015, Compliance Filing appears to show that GBX's transmission line were to be constructed using the Alternate Route in Montgomery County, the transmission line would cross directly over several existing buildings near the southeast corner of Parcel 03-35-200-001, located west of E 5th Rd. As GBX's Alternate Route continues eastward and southeastward from the location of these buildings, the map shows that the route crosses five adjacent parcels at a diagonal: 03-36-300-002; 03-36-400-004; 03-36-400-002; 04-31-300-01, and 04-31-300-007. The relevant portion of GBX's map is copied below:



- a. If the Alternate Route is used to construct the transmission line, please fully explain what action(s) GBX will take to address the presence of the buildings on Parcel 03-35-200-001.
- b. Please fully explain why GBX's Alternate Route in Montgomery County is superior to an alternative route that avoids the buildings on Parcel 03-35-200-001 and eliminates diagonal field crossings by following property and/or field lines. Specifically, consider an alternative route that turns south along the east property line of Parcel 03-35-400-001, then east to follow field and property lines to re-join GBX's Alternate Route at the northeast corner of Parcel 04-31-300-004 (red line).
- c. What would be GBX's increase or decrease in cost to construct the transmission line if GBX were to use the route modification contemplated in (b) instead of GBX's Alternate Route? Please include avoided costs for building demolition/relocation in the response.
- 6. The map on page 139, Tile 69 of 77 (Part 3, Att. 3 Part 12) of Attachment 3 to GBX's August 12, 2015, Compliance Filing appears to show that if GBX's transmission line were to be constructed using the Primary Route in Shelby County, the transmission line would pass over an existing building near the southern property line of Parcel 2127-12-00-300-011, located between Hwy 45 and Interstate 57. As GBX's Proposed Route continues generally eastward in Cumberland County, it crosses Parcel 11-07-400-001 at a diagonal to the northeast. The relevant portion of GBX's map is copied below:



- a. If GBX's Proposed Route is used to construct the transmission line, please fully explain what action(s) GBX will take to address the presence of the building on Parcel 2127-12-00-300-011.
- b. Please fully explain why GBX's Proposed Route is superior to an alternate route that that avoids the building on Parcel 2127-12-00-300-011 and eliminates the diagonal field crossings by turning northeast to parallel the railroad tracks and Hwy 45 before turning east along the north property line of Parcel 11-07-400-001 (red line).
- c. What would be GBX's increase or decrease in cost to construct the transmission line if GBX were to use the route modification contemplated in (b) instead of GBX's Proposed Route? Please include avoided costs for building demolition/relocation in the response.
- 7. Page 117, Tile 58 of 77 (Part 3, Att. 3 Part 10) of Attachment 3 to GBX's August 12, 2015, Compliance Filing appears to show that GBX's Alternate Route in Cumberland County passes near residences on Parcel 08-36-300-022, Parcel 08-34-400-007, and Parcel 08-35-300-005. The relevant portion of GBX's map is copied below:



Please provide GBX's estimate of the distance, in feet, between the centerline of GBX's Alternate Route and these residences:

•	Parcel 08-36-300-022: f	feet from centerline to residence=
•	Parcel 08-34-400-007: f	feet from centerline to residence=

Parcel 08-35-300-005: feet from centerline to residence= _______

8. Please provide data for GBX's Proposed and Alternate Routes as indicated in the following table (if exact values are not known, please estimate):

		Proposed Route ¹	Alternate Route
(a)	Number of transmission line poles <u>not</u> located along property/field lines		
(b)	Number of residential buildings requiring demolition/relocation		
(c)	Number of non-residential buildings (barns, sheds, etc.) requiring demolition/relocation		
(d)	Shortest distance from center of easement to residential building (include county and PIN)		
(e)	Shortest distance from center of easement to non- residential building (include county and PIN)		

¹ Proposed Route includes the Rex Encore Modification, the Branch Revision, and the GBX Adjustment.

9. Please identify and explain impact(s) GBX's proposed HVDC transmission line might have on livestock/poultry located within the easement or in close proximity to the easement, and explain steps GBX will take to mitigate these impacts.